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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/855,025	05/15/2001	Andrew Chang	FOUND-0005	7988

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EXAMINER
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DAVIS, CYNTHIA L

ART UNIT	PAPER NUMBER
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2665

DATE MAILED: 11/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/855,025

Applicant(s)

CHANG ET AL.

Examiner

Cynthia L Davis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 November 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |                                                                                                    |                                                                             |
|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____.                                                |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>4-6</u> .                                                                 | 6) <input type="checkbox"/> Other: ____.                                    |

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## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 13 is objected to because of the following informalities: the word "packer" should be replaced with "packet". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Use of the term "parses" for converting cells into packets goes against the accepted meaning of the word "parse" in the art, which is to divide a thing into its smaller component parts (see Newton's Telecom Dictionary definition of "parse"). This renders the claim indefinite.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-6, 13-14 and 17-18 are rejected under 35 U.S.C. 102(a) as being anticipated by Parruck.

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Regarding claim 1, a translator is disclosed in Parruck, figure 3, element 302; column 7, line 26 (identifying element 302 as a segmentation and reassembly engine); and column 1, lines 49-50. Parsing packets into narrow cells is disclosed in figure 3, element 342, and column 7, line 66-column 8, line 1. A first and second group of one or more transceivers is disclosed in figure 3, elements 312, 320, 340, and 350 (these are the inputs and outputs by which the SAR, element 302, is connected to the transceivers in the rest of the network). The translator being coupled to said first group and said second group of transceivers is disclosed in figure 3.

Regarding claim 2, the translator further constructing narrow cells into packets is disclosed in figure 3, element 316 and column 7, lines 31-32.

Regarding claim 3, one or more memory pools to store one or more packets and narrow cells is disclosed in figure 3, elements 318 and 344. One or more reference clocks that synchronize one or more operations of said translator is disclosed in column 10, lines 31 and 39.

Regarding claim 4, an administrator module that provides a user with control over said one or more operations of said translator is disclosed in column 11, lines 47-49 (the network operators may control the operations of the translator).

Regarding claim 5, one or more packet decoders that parse packets into information fields, and one or more cell encoders that construct one or more narrow cells from said information fields is disclosed in figure 3, element 342, and column 7, line 66-column 8, lines 12.

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Regarding claim 6, a cell decoder that parses one or more narrow cells into information fields, and a packet encoder that constructs one or more packets from said information fields is disclosed in figure 3, element 316, and column 7, lines 31-34.

Regarding claim 13, determining a port type wherein said port type includes the configuration of packet processing components and selecting a cell format, wherein said cell format is dependent on said port type is disclosed column 7, lines 46-63 (the header information is part of the cell type, and it is dependent on the port). Receiving one or more packets from a port, parsing one or more packets into information, formatting said information into one or more cells, and forwarding said one or more cells to an interface is disclosed in figure 3, element 342, and column 7, line 66-column 8, lines 12.

Regarding claim 14, storing said information prior to said formatting step is disclosed in column 7, line 66-column 8, lines 12 (the information is kept during the segmenting and mapping steps, so it must be stored somewhere).

Regarding claim 17, receiving one or more cells, parsing said one or more cells into information, storing said information into one or more packets, and forwarding said one or more packets is disclosed in figure 3, element 316, and column 7, lines 31-34.

Regarding claim 18, queuing up said one or more cells and synchronizing the cells prior to said parsing step is disclosed in figure 5 (showing the receive PSO-PHY and Utopia Interface, suitable for use in figure 3, element 312; when the ATM traffic is forwarded, the cells are queued up until the reassembly engine

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processes them) and column 10, line 39 (the Utopia interface has a receive clock signal for synchronization).

4. Claims 8-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Kunimoto.

Regarding claim 8, a cell format comprising a header that includes a special character and control information, and a payload that includes data is disclosed in column 4, lines 27-46.

Regarding claim 9, the control information including routing addresses for said payload is disclosed in column 4, lines 33-34 (the VCN is routing information).

Regarding claim 10, the header being four bytes and the payload being 32 bytes is disclosed in column 4, lines 31-33.

Regarding claim 11, the header reserving one or more bytes for additional information is disclosed in column 4, lines 27-46 (listing the various types of information contained in the header)

Regarding claim 12, a cell format comprising a special character that indicates the start of a cell, control information that includes slot information and state information of said cell, and a payload that includes data is disclosed in column 4, lines 27-46, and figure 5(b) (the VCN at the start of the cell indicates the start of a cell, and would also include slot information; the state of the cell is indicated in the HCS field, which indicates header abnormalities).

***Claim Rejections - 35 USC § 103***

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Parruck in view of Epps and Shung. The translator operating with packets in a parallel configuration and narrow cells in a serial configuration is missing from Parruck. However, operating with packets in parallel is disclosed in Epps, column 16, lines 62-65. It would have been obvious to one skilled in the art at the time of the invention to deal with packets in parallel. The motivation would be to improve throughput. Operating with cells serially is disclosed in Shung, column 1, lines 36-50. It would have been obvious to one skilled in the art at the time of the invention to deal with cells serially. The motivation would be to improve throughput.

6. Claims 15 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parruck in view of Epps.

Regarding claim 15, the receiving step involving packets in a parallel configuration is missing from Parruck. However, receiving packets in parallel is disclosed in Epps, column 16, lines 62-65. It would have been obvious to one skilled in the art at the time of the invention to receive the packets in parallel. The motivation would be to improve throughput.

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Regarding claim 20, the forwarding step involving packets in a parallel configuration is missing from Parruck. However, transmitting packets in parallel is disclosed in Epps, column 16, lines 62-65. It would have been obvious to one skilled in the art at the time of the invention to forward the packets in parallel. The motivation would be improve throughput.

7. Claims 16 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parruck in view of Shung.

Regarding claim 16, the forwarding step involving cells in serial configuration is missing from Parruck. However, transmitting cells serially is disclosed in Shung, column 1, lines 36-50. It would have been obvious to one skilled in the art at the time of the invention to forward the cells serially. The motivation would be to improve throughput.

Regarding claim 19, the receiving step involving cells in a serial configuration is missing from Parruck. However, receiving cells serially is disclosed in Shung, column 1, lines 36-50. It would have been obvious to one skilled in the art at the time of the invention to receive the cells serially. The motivation would be to improve throughput.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia L Davis whose telephone number is (571) 272-3117. The examiner can normally be reached on 8:30 to 6, Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (703) 272-3155. The fax



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phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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